

STATE OF INDIANA
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
AUTHORIZATION TO DISCHARGE UNDER THE
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

In compliance with the provisions of the Federal Water Pollution Control Act, as amended, (33 U.S.C. 1251 et seq., the "Act"), and IDEM's permitting authority under IC 13-15, as amended, (formerly IC 13-7), the

**DEPARTMENT OF PUBLIC WORKS
CITY OF INDIANAPOLIS
AND ITS CONTRACT OPERATOR
WHITE RIVER ENVIRONMENTAL PARTNERSHIP**

are authorized to discharge from the Southport Advanced Wastewater Treatment (AWT) Plant located at 3800 West Southport Road, Indianapolis, Indiana to receiving waters named the West Fork of the White River in accordance with effluent limitations, monitoring requirements, and other conditions set forth in Parts I, II, and III hereof.

Effective Date: _____.

Expiration Date: _____.

In order to receive authorization to discharge beyond the date of expiration, the permittee(s) shall submit such information and forms as are required by the Indiana Department of Environmental Management no later than 180 days prior to the date of expiration.

Signed this ____ day of _____, for the Indiana Department of Environmental Management.

Matthew C. Rueff
Assistant Commissioner
Office of Water Management

TREATMENT FACILITY DESCRIPTION

The Southport Advanced Wastewater Treatment (AWT) Plant, one of two serving Indianapolis, is a Class IV plant with an average design flow of 125 MGD. It is comprised of a 90 MGD oxygen nitrification activated sludge facility and a 35 MGD air nitrification plant. Four biological roughing towers as well as multi-media filters are in place. Disinfection is by chlorination/dechlorination. Mass limits are calculated based upon the 125 MGD design flow.

PART I

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

- During the period beginning on the effective date of this permit and lasting until the expiration date, the permittee(s) is authorized to discharge from Outfall 001. The permittee(s) shall take samples and measurements to meet the effluent limitations and monitoring requirements at a location representative of the discharge. Such discharge shall be limited and monitored by the permittee(s) as specified below:

TABLE 1

<u>Parameter</u>	<u>Quantity or Loading</u>		<u>Units</u>	<u>Quality or Concentration</u>		<u>Units</u>	<u>Monitoring Requirements</u>	
	<u>Average</u>	<u>Average</u>		<u>Average</u>	<u>Average</u>		<u>Frequency</u>	<u>Sample Type</u>
Flow [1]	Report	Report	MGD	---	---	---	Continuous	24-Hr. Total
CBOD ₅ ***								
Summer [2]	10431	15647	lbs/day	10	15	mg/l	Daily	24-Hr. Comp.
Winter [3]	26078	41725	lbs/day	25+	40	mg/l	Daily	24-Hr. Comp.
TSS ***								
Summer [2]	10431	15647	lbs/day	10	15	mg/l	Daily	24-Hr. Comp.
Winter [3]	31294	46941	lbs/day	30 +	45	mg/l	Daily	24-Hr. Comp.
Ammonia-N								
Interim								
Summer [2]	4170	6255	lbs/day	4.0	6.0	mg/l	Daily	24-Hr. Comp.
Winter [3]	7298	10946	lbs/day	7.0	10.5	mg/l	Daily	24-Hr. Comp.
Final*								
Summer [2]	1565	2295	lbs/day	1.5	2.2	mg/l	Daily	24-Hr. Comp.
Winter [3]	2295	3547	lbs/day	2.2	3.4	mg/l	Daily	24-Hr. Comp.
Fecal coliform [5]	--	--	--	200	400	Count/100ml	Daily	Grab

+ Or 85% removal, whichever is more stringent. The wet weather flow and percent removal rates shall be maintained as a separate data base and submitted as a part of the next NPDES permit application.

TABLE 2

<u>Parameter</u>	Quality or Concentration			<u>Units</u>	<u>Monitoring Sample Frequency</u>	<u>Requirements Type</u>
	<u>Daily Minimum</u>	<u>Daily Maximum</u>	<u>Monthly Average</u>			
Dissolved Oxygen [4]						
Interim						
Summer [2]	8.0	--	--	mg/l	Daily	12 Grabs/24-Hr.
Winter [3]	4.0	--	--	mg/l	Daily	12 Grabs/24-Hr.
Final*						
Summer [2]	7.0	--	--	mg/l	Daily	12 Grabs/24-Hr.
Winter [3]	4.0	--	--	mg/l	Daily	12 Grabs/24-Hr.
pH	6.0	9.0	--	s.u.	Daily	Grab
<i>E. coli</i> ** [5]	--	235	125	Count/100ml	Daily	Grab
TRC [6,7] *	--	0.02	0.01	mg/l	Daily	Grab

NOTE: Refer to Part I.B. of this permit for additional monitoring and reporting requirements.
Refer to Part I.F. of this permit for Whole Effluent Toxicity Requirements

* Refer to Part I.D. & E. of this permit for the Schedule of Compliance.

** The City of Indianapolis has submitted an application for a variance from the daily maximum effluent limitation for *E. coli*. In the event that the effluent limitation is stayed pursuant to 327 IAC 5-3-4.1(b) or IDEM determines that the variance should be granted as requested, then the final permit would not contain a daily maximum *E. coli* limitation, but may instead include a weekly average limitation for fecal coliform of 400/ ml for the months of April through October. Before IDEM makes a final determination on the variance application (to grant, modify or deny), IDEM will first provide a public comment period on its tentative determination and follow the procedures set forth in 327 IAC 5-3-4.1(f) - (i).

*** The City of Indianapolis has submitted an application for a variance from the effluent limitations for CBOD and TSS during wet weather conditions (when the influent flow rate exceeds 150 MGD). In the event these effluent limitations are stayed pursuant to 327 IAC 5-3-4.1(b), then the limitations for these parameters would be as follows:

Parameter	Mass (in lbs/day)		Concentration (in mg/l)	
	Monthly Average	Weekly Average	Monthly Average	Weekly Average
Total BOD ₅				
Summer	10,425	15,638	10	15
Winter	31,275	46,913	30 ¹	45
Total Suspended Solids				
Summer	10,425	15,638	10	15
Winter	31,275	46,913	30 ¹	45

¹ Or 85% removal, whichever is more stringent.

In the event IDEM determines that the variance should be granted as requested, then the

following secondary treatment limitations would be in effect during any period in which the influent flow rate exceeds 150 MGD, calculated on an instantaneous flow rate basis, for 4 hours or more, as a result of wet weather conditions:

Parameter	Mass (in lbs/day)		Concentration (in mg/l)	
	Monthly Average	Weekly Average	Monthly Average	Weekly Average
CBOD ₅	Report	Report	25 ¹	40
TSS	Report	Report	30 ¹	45

¹ Or 85% removal, whichever is more stringent.

Before IDEM makes a final determination on the variance application (to grant, modify or deny), IDEM will first provide a public comment period on its tentative determination and follow the procedures set forth in 327 IAC 5-3-4.1(f) - (i).

- [1] Flow measurement is required per 327 IAC 5-2-13. The flow meter(s) shall be calibrated at least once annually.
- [2] Summer limitations apply from May 1 through November 30 of each year.
- [3] Winter limitations apply from December 1 through April 30 of each year.
- [4] The reported daily average concentration of dissolved oxygen in the effluent shall be the arithmetic mean determined by summation of the 12 daily grab sample results and dividing this sum by 12. These samples are to be collected over equal time intervals during the period of operator attendance.

Disinfection Requirements

- [5] The effluent shall be disinfected on a continuous basis such that excursions above the fecal coliform and *E. coli* limitations do not occur from April 1 through October 31, annually. The monthly average *E. coli* value shall be calculated as a geometric mean. Practice of chlorination for any reason from November 1 through March 31 shall result in the maximum residual chlorine restrictions and monitoring requirements being effective whenever the disinfectant is used. The monthly and weekly average fecal coliform values shall be calculated as a geometric mean. The permittee may monitor and report fecal coliform for the first three months after the effective date of this permit in lieu of *E. coli*.

This period should be sufficient to allow the permittee time to obtain the correct culture medium for *E. coli*. Fecal coliform values shall be calculated as a geometric mean. After the

three month period, *E. coli* shall be monitored and reported during each disinfection season. The permittee must notify the Data Management Section of the Office of Water Management if they are going to monitor for fecal coliform in lieu of *E. coli* at least 15 days prior to the effective date of this permit

[6] During the interim 12-month period after the effective date of the permit, the permittee(s) is required to comply with the daily maximum effluent limit of 1.0 mg/l for total residual chlorine as measured at the effluent end of the chlorine contact tank. Also during this period the permittee is required to dechlorinate the effluent to the best of their abilities. After the interim period, the permittee(s) shall comply with the effluent limitations for total residual chlorine contained under Part I.A.1, Table 2.

[7] Compliance with this permit will be demonstrated if the observed effluent concentrations are less than the limit of quantitation (0.06 mg/l). If the measured effluent concentrations are above the water quality-based permit limitations and above the limit of detection specified by the permit in any of three (3) consecutive analyses or any five (5) out of nine (9) analyses, the discharger is required to re-evaluate their chlorination/dechlorination practices to make any necessary changes to assure compliance with the permit limitation for TRC.

Effluent concentrations less than the limit of quantitation shall be reported on the discharge monitoring report forms as the actual value. Effluent concentrations less than the limit of detection shall be reported on the discharge monitoring report forms as less than the value of the limit of detection. For example, if a substance is not detected at a concentration of 0.02 mg/l, report the value as ≤ 0.02 mg/l. At present, two methods are considered to be acceptable to IDEM, amperometric and DPD colorimetric methods, for chlorine concentrations at the level of 0.06 mg/l.

<u>Parameter</u>	<u>LOD/MDL</u>	<u>LOQ</u>
Chlorine	0.02 mg/l	0.06 mg/l

Case-Specific LOD/MDL

The permittee(s) may determine a case-specific limit of detection (LOD) using the analytical method specified above, or any other test method which is approved by the IDEM prior to use. The LOD shall be derived by the procedure specified for MDLs contained in 40 CFR Part 136, Appendix B, and the limit of quantitation shall be set equal to 3.18 times the LOD. Other methods may be used if first approved by IDEM.

2. Minimum Water Quality Requirements

The discharge from any and all point sources regulated within this permit shall not cause receiving waters, including the mixing zone, to contain substances, materials, floating debris, oil, or scum:

- a. that will settle to form putrescent or otherwise objectionable deposits;
- b. that are in amounts sufficient to be unsightly or deleterious;
- c. that produce color, visible oil sheen, odor, or other conditions in such degree as to create a nuisance;
- d. which are in amounts sufficient to be acutely toxic to, or to otherwise severely injure or kill aquatic life, other animals, plants, or humans;
- e. which are in concentrations or combinations that will cause or contribute to the growth of aquatic plants or algae to such a degree as to create a nuisance, be unsightly, or otherwise impair the designated uses.

3. Additional Discharge Limitations and Monitoring Requirements

- a. During the period beginning on the effective date of the permit, and continuing until three years after the effective date, the effluent from Outfall 001 shall be limited and monitored by the permittee(s) as follows:

<u>Pollutant</u>	<u>Quality or Concentration</u>			<u>Monitoring Requirements</u>	
	<u>Monthly Average</u>	<u>Daily Maximum</u>	<u>Unit</u>	<u>Measurement Frequency</u>	<u>Sample Type</u>
Cadmium [1]	--	0.02	mg/l	1 X Weekly	24 Hr. Comp.
Cyanide [2]	--	0.027	mg/l	1 X Weekly	See [3] Below
Mercury [1,4]	--	0.0005	mg/l	4 X Yearly	24 Hr. Comp.
Chloride[5]	Report	Report	mg/l	1 X Weekly	24 Hr. Comp.
Fluoride[5]	Report	Report	mg/l	1 X Weekly	24 Hr. Comp.
Sulfate[5]	Report	Report	mg/l	1 X Weekly	24 Hr. Comp.
TDS[5]	Report	Report	mg/l	1 X Weekly	24 Hr. Comp.

- [1] The above-noted parameters are intended to be analyzed by a test method which will measure the quantity of acid-soluble metal present, however, an approved analytical method for acid-soluble metal is not yet available. The permittee(s) shall measure and report these parameters as total recoverable metal until such a test method is approved which measures acid-soluble metal.
- [2] The above-noted parameters are to be analyzed by a test method which measures the amenable quantity.
- [3] The maximum holding time for cyanide (CN) is 24 hours when sulfide is present and 14 days when sulfide is absent, according to 40 CFR 136.3, Table II. Therefore, CN is to be monitored by collecting a representative grab sample and analyzing it within 24 hours. Alternatively, if the permittee(s) can demonstrate the wastewater contains no sulfide, the permittee(s) may collect a composite sample and analyze it within 14 days.
- [4] The permittee(s) shall monitor mercury utilizing the following method.

<u>Parameter</u>	<u>EPA Method</u>	<u>LOD</u>	<u>LOQ</u>
Mercury	1631	0.2 ng/l	0.5 ng/l

- [5] Effluent will be monitored once weekly for the life of the permit following the

effective date of the permit. The permittee(s) will vary the day of the week on which the monitoring is performed throughout every month. The permittee(s) may, at any time, submit and request review of monitoring data once a statistically significant data set has been achieved. The permit may be modified to remove monitoring requirements for any of the above parameters that will not be discharged at a level that will cause, have the reasonable potential to cause or contribute to an excursion above a water quality criterion for 327 IAC 2-1. Conversely, effluent limitations and monitoring requirements and a suitable schedule of compliance, if needed, may be added for any parameter found to be capable of reasonable potential to cause or contribute to an excursion above the water quality criterion for that parameter.

- b. During the period beginning three years after the effective date of the permit, and continuing until the expiration date, the effluent from Outfall 001 shall be limited and monitored by the permittee(s) as follows:

Pollutant	Quality or Concentration			Monitoring Requirements	
	Monthly <u>Average</u>	Daily <u>Maximum</u>	<u>Unit</u>	Measurement <u>Frequency</u>	Sample <u>Type</u>
Cadmium [1]	0.004	0.009	mg/l	1 X Weekly	24 Hr. Comp.
Cyanide [2,5,6]	0.008	0.019	mg/l	1 X Weekly	See [3] Below
Mercury [1,4]	0.00001	0.00002	mg/l	4 X Yearly	24 Hr. Comp.
Chloride [7]	Report	Report	mg/l	1 X Weekly	24 Hr. Comp.
Fluoride [7]	Report	Report	mg/l	1 X Weekly	24 Hr. Comp.
Sulfate [7]	Report	Report	mg/l	1 X Weekly	24 Hr. Comp.
TDS [7]	Report	Report	mg/l	1 X Weekly	24 Hr. Comp.

- [1] The above-noted parameters are intended to be analyzed by a test method which will measure the quantity of acid-soluble metal present, however, an approved analytical method for acid-soluble metal is not yet available. The permittee(s) shall measure and report these parameters as total recoverable metal until such a test method is approved which measures acid-soluble metal.
- [2] The above-noted parameters are to be analyzed by a test method which measures the total quantity. The City of Indianapolis has submitted an application for a variance from the effluent limitations for total cyanide. In the event that the effluent limitations for this parameter are stayed pursuant to 327 IAC 5-3-4.1(b), then the final permit would contain a daily maximum limitation for free (amenable) cyanide of 0.027 mg/l. In the event IDEM determines that the variance should be granted as requested, then the final permit would contain a daily maximum limitation for free (amenable) cyanide of 0.019 mg/l and a monthly average limitation of 0.008 mg/l. Before IDEM makes a final determination on the variance application (to grant, modify or deny), IDEM will first provide a public comment period on its tentative determination and follow the procedures set forth in 327 IAC 5-3-4.1(f) - (i).
- [3] The maximum holding time for cyanide (CN) is 24 hours when sulfide is present and 14 days when sulfide is absent, according to 40 CFR 136.3, table II. Therefore, CN is to be monitored by collecting a representative grab sample and analyzing it within 24 hours. Alternatively, if the permittee(s) can demonstrate the wastewater contains no sulfide, the permittee(s) may collect a composite sample and analyze it within 14 days.

[4] The permittee(s) shall monitor mercury utilizing the following method.

<u>Parameter</u>	<u>EPA Method</u>	<u>LOD</u>	<u>LOQ</u>
Mercury	1631	0.2 ng/l	0.5 ng/l

The City of Indianapolis has submitted an application for a variance from the effluent limitations for mercury. In the event that the effluent limitations for this parameter are stayed pursuant to 327 IAC 5-3-4.1(b) or IDEM determines that the variance should be granted as requested, then the final permit would contain a daily maximum limitation for mercury of 0.0005 mg/l. Before IDEM makes a final determination on the variance application (to grant, modify or deny), IDEM will first provide a public comment period on its tentative determination and follow the procedures set forth in 327 IAC 5-3-4.1(f) - (i).

[5] The water quality-based monthly average effluent limitation for cyanide is less than the limit of quantitation (LOQ) as defined below. Compliance with this permit will be demonstrated if the observed effluent concentrations for the monthly average is less than the limit of quantitation and the observed daily maximum effluent concentration is equal to or less than the table value.

<u>Parameter</u>	<u>EPA Method</u>	<u>LOD</u>	<u>LOQ</u>
Cyanide	335.3	0.005 mg/l	0.016 mg/l

CASE-SPECIFIC LOD/LOQ

[6] The permittee(s) may determine a case-specific limit of detection or limit of quantitation using the analytical method specified above, or any other test method which is approved by the IDEM prior to use. The limit of detection shall be derived by the procedure specified for method detection limits contained in 40 CFR Part 136, Appendix B, and the limit of quantitation shall be set equal to 3.2 times the limit of detection. Other methods may be used if first approved by the IDEM.

Effluent concentrations less than the limit of quantitation shall be reported on the discharge monitoring report forms as the actual value. Effluent concentrations less than the limit of detection shall be reported on the discharge monitoring report forms as less than the value of the limit of detection. For example, if a substance is not detected at a concentration of 0.1 ug/l, report the value as ≤ 0.1 ug/l. If the measured effluent concentrations for a substance are above the water quality-based permit limitations and above the limit of detection specified by the permit in any three (3) consecutive analyses or any five (5) out of nine (9) analyses or the additional requirements, if any, required below indicate that the substance is present in the effluent at concentrations exceeding the water quality-based permit limitations, the discharger will be required to:

- (A) Determine the source of this substance through evaluation of sampling techniques, analytical/laboratory procedures, and industrial processes and wastestreams.
- (B) Increase the frequency of sampling and testing for the substance.

- (C) Take corrective action to reduce the pollutant in the effluent below the water quality-based effluent limit.

[7] Effluent will be monitored once weekly for the life of the permit. The permittee(s) will vary the day of the week on which the monitoring is performed throughout every month. The permittee(s) may, at any time, submit and request review of monitoring data once a statistically significant data set has been achieved. The permit may be modified to remove monitoring requirements for any of the above parameters that will not be discharged at a level that will cause, have the reasonable potential to cause or contribute to an excursion above a water quality criterion for 327 IAC 2-1. Conversely, effluent limitations and monitoring requirements and a suitable schedule of compliance, if needed, may be added for any parameter found to be capable of reasonable potential to cause or contribute to an excursion above the water quality criterion for that parameter.

4. Additional Monitoring Requirements

During the period beginning on the effective date of this permit and lasting until the expiration date, the permittee(s) shall conduct the following monitoring activities:

a. Influent Monitoring

The permittee(s) shall monitor the influent to its wastewater treatment facility for the following pollutants. Samples shall be representative of the raw influent, prior to mixing with any other wastewater (recycle streams, supernatant return, etc.).

Parameter [1]	Quality or Concentration		Unit	Monitoring Requirements	
	Monthly <u>Average</u>	Daily <u>Maximum</u>		Measurement <u>Frequency</u>	Sample <u>Type</u>
Cadmium	Report	Report	mg/l	2 X Monthly	24 Hr. Comp.
Chromium	Report	Report	mg/l	2 X Monthly	24 Hr. Comp.
Copper	Report	Report	mg/l	2 X Monthly	24 Hr. Comp.
Cyanide -A	Report	Report	mg/l	2 X Monthly	See [2] Below
Cyanide -T	Report	Report	mg/l	2 X Monthly	See [2] Below
Lead	Report	Report	mg/l	2 X Monthly	24 Hr. Comp.
Mercury [3]	Report	Report	mg/l	4 X Yearly	24 Hr. Comp.
Nickel	Report	Report	mg/l	2 X Monthly	24 Hr. Comp.
Zinc	Report	Report	mg/l	2 X Monthly	24 Hr. Comp.
Chloride	Report	Report	mg/l	2 X Monthly	24 Hr. Comp.
Fluoride	Report	Report	mg/l	2 X Monthly	24 Hr. Comp.
Sulfate	Report	Report	mg/l	2 X Monthly	24 Hr. Comp.
TDS	Report	Report	mg/l	2 X Monthly	24 Hr. Comp.
Arsenic	Report	Report	mg/l	2 X Monthly	24 Hr. Comp.

[1] All metals shall be reported as Total Metals. Cyanide shall be reported as both total and amenable cyanide.

[2] The maximum holding time for cyanide (CN) is 24 hours when sulfide is present and 14 days when sulfide is absent, according to 40 CFR 136.3, Table II. Therefore, CN is to be monitored by collecting a representative grab sample and analyzing it within 24 hours. Alternatively, if the permittee(s) can demonstrate the wastewater contains no sulfide, the permittee(s) may collect a composite sample and analyze it within 14 days.

[3] The permittee(s) shall monitor mercury utilizing the following method.

<u>Parameter</u>	<u>EPA Method</u>	<u>LOD</u>	<u>LOQ</u>
Mercury	1631	0.2 ng/l	0.5 ng/l

b. Organic Pollutant Monitoring

The permittee(s) shall conduct an annual inventory of organic pollutants and shall identify and quantify additional organic compounds which occur in the influent, effluent, and sludge. The analytical report shall be sent to the Pretreatment Group. This report is due in December of each year. The inventory shall consist of:

1. Sampling and Analysis of Influent and Effluent

Sampling shall be conducted on a day when industrial discharges are occurring at normal levels. The samples shall be 24-hour flow proportional composites, except for volatile organics, which shall be taken by appropriate grab sampling techniques. Analysis for the U.S. EPA organic priority pollutants shall be performed using U.S. EPA methods 624, 625 and 608 in 40 CFR 136, or other equivalent methods approved by U.S. EPA. Equivalent methods must be at least as sensitive and specific as methods 624, 625 and 608.

All samples must be collected, preserved and stored in accordance with 40 CFR 136, Appendix A. Samples for volatile organics must be analyzed within 14 days of collection. Samples for semivolatile organics, PCBs and pesticides must be extracted within 7 days of collection and analyzed within 40 days of extraction. For composite samples, the collection date shall be the date at the end of the daily collection period.

2. Sampling and Analysis of Sludge

Sampling collection, storage, and analysis shall conform to the U.S. EPA recommended procedures equivalent to methods 624, 625 and 608 in 40 CFR 136 or applicable methods in SW 846, "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods". Special sampling and/or preservation techniques will be required for those pollutants which deteriorate rapidly.

Sludge samples for volatile organics must be analyzed within 14 days of collection. Sludge samples for semivolatile organics, PCBs and pesticides must be extracted within 14 days of collection and analyzed within 40 days of extraction.

3. Additional Pollutant Identification

In addition to the priority pollutants, a reasonable attempt shall be made to identify and quantify the ten most abundant constituents of each fraction (excluding priority pollutants and unsubstituted aliphatic compounds) shown to be present by peaks on the total ion plots (reconstructed gas chromatograms) more than ten times higher than the adjacent background noise. Identification shall be attempted through the use of

U.S. EPA/NIH computerized library of mass spectra, with visual confirmation by an experienced analyst. Quantification may be based on an order of magnitude estimate based upon comparison with an internal standard.

The annual program effectiveness review, Part III. A.5, should identify the additional steps necessary to determine whether the pollutants present interfere, pass through, or otherwise violate 40 CFR 403.2. Upon such determination, the report must also identify the steps taken to develop and enforce local limitations on industrial discharges for those pollutants. This is a requirement of 40 CFR 403.5.

5. Storm Water Discharges Associated With Industrial Activity

During the period beginning on the effective date of this permit and lasting until the expiration date, the permittee is authorized to discharge storm water from the storm water retention basin which combines with the treated effluent prior to discharge from Outfall 001. Since the discharges from the retention basin to Outfall 001 rarely occur, the storm water is only required to be monitored in the event that such a discharge to Outfall 001 does occur. Samples must be taken within the first thirty minutes of discharge from the ponds after initiation of a storm event. In addition to any other pollutants which are expected to be present in the discharge, the permittee shall monitor for the following parameters:

<u>Parameter</u>	<u>Quality or</u> <u>Daily Max</u>	<u>Concentration</u> <u>Units</u>	<u>Sample Type</u>
Flow	Report	gal	Estimate Total
Total Suspended Solids	Report	mg/l	Grab
pH	Report	s.u.	Grab
Oil & Grease	Report	mg/l	Grab
CBOD ₅	Report	mg/l	Grab
COD	Report	mg/l	Grab
Total Kjeldahl Nitrogen	Report	mg/l	Grab
Nitrate plus Nitrite Nitrogen	Report	mg/l	Grab
Total Phosphorus	Report	mg/l	Grab

The permittee shall also develop a storm water pollution prevention plan using the procedures outlined in 327 IAC 15-6-7 for the storm water runoff from the wastewater treatment plant site. The plan shall be retained on-site at the wastewater treatment plant.

B. MONITORING AND REPORTING

1. Representative Sampling

Samples and measurements taken as required herein shall be representative of the volume and nature of the monitored discharge.

2. Data on Plant Operation

The raw influent and the wastewater from intermediate unit treatment processes, as well as the final effluent shall be sampled and analyzed for the pollutants and operational parameters specified by the applicable Monthly Report of Operation Form, as appropriate, in accordance with 327 IAC 5-2-13.

3. Reporting

The permittee(s) shall submit monitoring reports to the Indiana Department of Environmental Management containing results obtained during the previous month and shall be postmarked no later than the 28th day of the month following each completed monitoring period. The first report shall be submitted by the 28th day of the month following the month in which the permit becomes effective. These reports shall include, but not necessarily be limited to, the Discharge Monitoring Report and the Monthly Report of Operation. The Regional Administrator may request the permittee(s) to submit monitoring reports to the Environmental Protection Agency if it is deemed necessary to assure compliance with the permit.

4. Definitions

a. Effluent Limitations

The arithmetic mean of the TBOD₅ and/or CBOD₅, ammonia-nitrogen, mercury, cadmium, cyanide and TSS values. The geometric mean of fecal coliform and *E. coli* values and the daily maximum values of mercury, cadmium and cyanide for effluent samples collected in a calendar month, week or day shall not exceed the monthly averages, weekly averages or daily maximum values contained in the Discharge Limitation Section of this permit for concentration and quantity.

b. Terms

- (1) "Monthly Average" - The monthly average discharge means the total discharge during a calendar month. The monthly average shall be determined by the summation of the measured daily discharge divided by the number of days during the calendar month when measurements were taken.
- (2) "Weekly Average" - The weekly average discharge means the highest average of a calendar week during a calendar month. The weekly average shall be determined by the summation of the measured daily discharge divided by the number of days during the calendar week when measurements were taken.
- (3) "Daily Maximum" -The daily maximum discharge limitation is the maximum allowable daily discharge for any calendar day. The "daily discharge" means the total mass of a pollutant discharged during the calendar day or, in the case of a pollutant limited in terms other than mass pursuant to 327 IAC 5-2-11(e), the average concentration or other measurement of the pollutant specified over the calendar day or any twenty-four hour period that reasonably represents the calendar day for the purpose of sampling.
- (4) The 24-hour Composite Sample consists of at least 12 grab samples collected over equal time intervals during the period of operator attendance. The grab samples for the composites shall be proportioned to flow. A flow proportioned composite sample is obtained by:
 - (a) recording the discharge flow rate at the time each individual sample is taken,
 - (b) adding together the discharge flow rates recorded from each individuals sampling time to formulate the "total flow value,"
 - (c) the discharge flow rate of each individual sampling time is divided by the total flow value to determine its percentage of the total flow value.
 - (d) then multiply the volume of the total composite sample by each individual samples percentage to determine the volume of that individual sample which will be included in the total composite sample.
- (5) TBOD₅: Total Biochemical Oxygen Demand
- (6) CBOD₅: Carbonaceous Biochemical Oxygen Demand
- (7) TSS: Total Suspended Solids

(8) *E. coli*: Escherichia coli bacteria

- c. The "Regional Administrator" is defined as the Region V Administrator, U.S. EPA, located at 77 West Jackson Boulevard, Chicago, Illinois 60604.
- d. The "Commissioner" is defined as the Commissioner of the Indiana Department of Environmental Management, located at the following address: 100 North Senate Avenue, P.O. Box 6015, Indianapolis, Indiana 46206-6015.

5. Test Procedures

The analytical and sampling methods used shall conform to the current version of 40 CFR, Part 136. The approved methods may be included in the texts listed below. However, different but equivalent methods are allowable if they receive the prior written approval of the State agency and the U.S. Environmental Protection Agency. Where no test procedure under 40 CFR 136 has been approved, analytical work shall be conducted in accordance with the most recent edition of "Standard Methods for the examination of Water and Wastewater", published by the American Public Health Association (APHA) or as otherwise specified by the commissioner.

- a. Standard Methods for the Examination of Water and Wastewater
19th Edition, 1995, American Public Health Association,
Washington, D.C. 20005.
- b. A.S.T.M. Standards, Part 23, Water; Atmospheric Analysis
1972 American Society for Testing and Materials,
Philadelphia, PA 19103.
- c. Methods for Chemical Analysis of Water and Wastes
June 1974, Revised, March 1983, Environmental Protection
Agency, Water Quality Office, Analytical Quality Control
Laboratory, 1014 Broadway, Cincinnati, OH 45202.

6. Recording of Results

For each measurement or sample taken pursuant to the requirements of this permit, the permittee(s) shall record the following information:

- a. The exact place, date, and time of sampling;
- b. The person(s) who performed the sampling or measurements;
- c. The dates the analyses were performed;
- d. The person(s) who performed the analyses;

- e. The analytical techniques or methods used; and
- f. The results of all required analyses and measurements.

7. Additional Monitoring by Permittee(s)

If the permittee(s) monitors any pollutant at the location(s) designated herein more frequently than required by this permit, using approved analytical methods as specified above, the results of such monitoring shall be included in the calculation and reporting of the values required in the Monthly Discharge Monitoring Report. Such increased frequency shall also be indicated.

8. Records Retention

All records and information resulting from the monitoring activities required by this permit, including all records of analyses performed and calibration and maintenance of instrumentation and recording from continuous monitoring instrumentation, shall be retained for a minimum of three (3) years. In cases where the original records are kept at another location, a copy of all such records shall be kept at the permitted facility. The three-year period shall be extended:

- a. automatically during the course of any unresolved litigation regarding the discharge of pollutants by the permittee(s) or regarding promulgated effluent guidelines applicable to the permittee(s); or
- b. as requested by the Regional Administrator or the Indiana Department of Environmental Management.

C. REOPENING CLAUSES

1. This permit may be modified or, alternately, revoked and reissued after public notice and opportunity for hearing to incorporate effluent limitations reflecting the results of a TMDL, wasteload allocation, additional stream studies, changes in water quality standards, or other information if the Department of Environmental Management determines that such effluent limitations are needed to assure that State Water Quality Standards are met in the receiving stream.
2. This permit may be modified due to a change in sludge disposal standards pursuant to Section 405(d) of the Clean Water Act, if the standards when promulgated contain different conditions, are otherwise more stringent, or control pollutants not addressed by this permit.
3. This permit may be modified, or alternately, revoked and reissued after public notice and opportunity for hearing to include whole effluent toxicity limitations or to include limitations for specific toxicants if the results of the biomonitoring and/or the TRE study indicate that such limitations are necessary.
4. This permit may be modified, or alternately, revoked and reissued, after public notice and opportunity for hearing, to include a case-specific Method Detection Level (MDL). The permittee(s) must demonstrate that such action is warranted in accordance with the procedure specified under Appendix B, 40 CFR Part 136, or approved by the Indiana Department of Environmental Management.
5. This permit may be modified or, alternatively, revoked and reissued after public notice and opportunity for hearing to incorporate additional requirements or limitations for specific toxicants if the required additional analyses in Part I.A.4. a. or b. indicate that such additional requirements and/or limitations are necessary to assure that State Water Quality Standards are met in the receiving stream.
6. This permit may be modified or, alternatively, revoked and reissued after public notice and opportunity for hearing to include and/or modify limitations to reflect any change in Indiana Water Quality Standards.
7. This permit may be modified or, alternatively, revoked and reissued after public notice and opportunity for hearing to incorporate additional requirements or limitations for specific effluent constituents when an approved EPA chemical testing protocol is developed for endocrine disruption.

8. Subsequent to a final determination on the pending variance applications submitted by the permittee(s), this permit may be modified or, alternatively, revoked and reissued after public notice and opportunity for hearing to incorporate a revised set of water quality-based effluent limits relating to parameters which are the subject of the pending variance application submitted by the permittee(s). Any final determinations which are made by IDEM concerning any variance requests shall be public noticed with opportunity for public comment and hearing.
9. This permit may be modified or, alternatively, revoked and reissued after public notice and opportunity for hearing to include effluent limitations for arsenic, chromium, copper, nickel, lead, and zinc should it be found to be discharged at a level that will cause, have the reasonable potential to cause, or contribute to an excursion above its water quality criterion as contained under 327 IAC 2-1.

D. SCHEDULE OF COMPLIANCE FOR D.O., AMMONIA-N, MERCURY, CADMIUM, AND CYANIDE

1. The permittee(s) shall submit a written progress report to the Compliance Evaluation Section, Office of Water Management nine (9) months from the effective date of the permit. The progress report shall include, among other items, a description of the method(s) selected for meeting new final requirements for ammonia-nitrogen, mercury, cadmium, and cyanide. **Final limitations for dissolved oxygen shall not become effective until compliance with the final ammonia-nitrogen limitations is achieved.** The new effluent limits for ammonia-nitrogen, mercury, cadmium, and cyanide are deferred for the term of this compliance schedule, or until completion of the necessary construction and/or implementation of pretreatment alternatives in accordance with Part III of this permit, unless notification is received in accordance with paragraph 3 below. Monitoring and reporting of ammonia-nitrogen, mercury, cadmium, and cyanide, is required during the interim period.
2. If construction and/or additional pretreatment requirements in accordance with Part III of this permit is not required to meet the final limits for any of the parameters within the thirty-six month period, the permittee(s) shall notify the Compliance Evaluation Section, Office of Water Management (OWM). Upon receipt of such notification by the OWM, the final limitations for ammonia-nitrogen, dissolved oxygen, mercury, cadmium, and cyanide will become effective. If construction is required a construction permit application (including Plans and Specifications) for complying with final requirements shall be submitted within fourteen (14) months from the effective date of the permit.
3. Initiation of construction and/or initiation of pretreatment alternatives in accordance with Part III of this permit, if necessary, shall commence not later than the twenty-three (23) months from the effective date of the permit. The permittee(s) shall submit a written progress report to the Compliance Evaluation Section, Office of Water Management at this time.
4. The permittee(s) shall submit a written progress report to the Compliance Evaluation Section, Office of Water Management thirty-two (32) months from the effective date of the permit.
5. Construction and/or all pretreatment changes in accordance with Part III of this permit shall be completed within thirty-five (35) months from the effective date of the permit. The permittee(s) shall submit a written progress report to the Compliance Evaluation Section, Office of Water Management when construction has been completed.
6. The permittee(s) shall comply with all final requirements no later than thirty-six (36) months from the effective date of the permit.

7. **If the permittee(s) fails to comply with any date in the foregoing schedule by more than fourteen (14) days**, the permittee(s) shall submit a written notice of noncompliance to the Compliance Evaluation Section, Office of Water Management delineating the cause of noncompliance, any remedial action taken or planned, and the probability of meeting the date fixed for compliance with final requirements.

E. SCHEDULE OF COMPLIANCE FOR TOTAL RESIDUAL CHLORINE

The permittee shall achieve compliance with the final effluent limits for TRC in accordance with the following schedule:

1. The permittee shall submit a progress report two (2) months from the effective date of the permit.
2. If construction is not required to meet the final limits for TRC within the twelve-month period, the permittee(s) shall notify the Compliance Evaluation Section, Office of Water Management (OWM). Upon receipt of such notification by the OWM, the final limitations for TRC shall become effective. If construction is required a construction permit application (including Plans and Specifications) for complying with final requirements shall be submitted within four (4) months from the effective date of the permit.
3. Initiation of construction, if necessary, shall commence not later than eight (8) months from the effective date of the permit.
4. Construction shall be completed within eleven (11) months from the effective date of the permit.
5. The permittee shall comply with all final requirements no later than twelve (12) months from the effective date of the permit.
6. If the permittee fails to comply with any date in the foregoing schedule by more than fourteen (14) days, the permittee shall submit a written notice of noncompliance to the Compliance Evaluation Section, Office of Water Management delineating the cause of noncompliance, any remedial action taken or planned, and the probability of meeting the date fixed for compliance with final requirements.

F. CHRONIC BIOMONITORING PROGRAM REQUIREMENTS

The 1977 Clean Water Act explicitly states, in Section 101(3) that it is the national policy that the discharge of toxic pollutants in toxic amounts be prohibited. In support of this policy the U.S. EPA in 1995 amended the 40 CFR 136.3 (Tables IA and II) by adding testing methods for measuring acute and short-term chronic toxicity of whole effluents and receiving waters. To adequately assess the character of the effluent, and the effects of the effluent on aquatic life, the permittee(s) shall conduct Whole Effluent Toxicity Testing. Part 1 of this section describes the testing procedures, Part 2 describes the Toxicity Reduction Evaluation which is only required if the effluent demonstrates toxicity, as described in paragraph f.

1. Whole Effluent Toxicity Tests

Within 90 days of the effective date of the permit, the permittee(s) shall initiate the series of bioassay tests described below to monitor the toxicity of the discharge from Outfall 001.

a. Bioassay Test Procedures and Data Analysis

- (1) All test organisms, test procedures and quality assurance criteria used shall be in accordance with the Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Water to Freshwater Organisms; Third Edition Section 13, Cladoceran (Ceriodaphnia dubia) Survival and Reproduction Test Method 1002.0; and Section 11, Fathead Minnow (Pimephales promelas) Larval Survival and Growth Test Method, (1000.0) EPA 600-4-91-002, July 1994 or most recent update.
- (2) Any circumstances not covered by the above methods, or that require deviation from the specified methods shall first be approved by the IDEM's Environmental Toxicology and Chemistry Section.
- (3) The determination of effluent toxicity shall be made in accordance with the Data Analysis general procedures for acute and chronic toxicity endpoints as outlined in Section 9, and in Sections 11 and 13 of the respective Test Method (1000.0 and 1002.0) of Short-term Methods of Estimating the Chronic Toxicity of Effluent and Receiving Water to Freshwater Organisms (EPA-600-4-91-002), Fourth Edition, July 1994 or most recent update.

b. Types of Bioassay Tests

The permittee(s) shall conduct a 7-day Cladoceran (Ceriodaphnia dubia) Survival and Reproduction Test and a 7-day Fathead Minnow (Pimephales promelas) Larval Survival and Growth Test on samples of the final effluent. All tests will be conducted on 24-hour composite samples of final effluent. All test solutions shall be renewed daily. On days three and five fresh 24-hour composite samples of the effluent collected on alternate days shall be used to renew the test solutions.

If, in any control, more than 10% of the test organisms die in 96 hours, or more than 20% of the test organisms die in 7 days, that test (control and effluent) shall be repeated. In addition, if in the Ceriodaphnia test the number of newborns produced per female or if 60% of females have less than three broods; and in the fathead minnow test if the mean dry weight in the control group is less than 25 mg, that test shall also be repeated. Such testing will determine whether the effluent affects the survival, reproduction, and/or growth of the test organisms. Results of all tests regardless of completion must be reported to IDEM.

c. Effluent Sample Collection and Chemical Analysis

(1) Samples taken for the purposes of Whole Effluent Toxicity Testing, will be at a point that is representative of the discharge but prior to discharge. The maximum holding time for whole effluent is 36 hours for a 24 hour composite sample. Bioassay tests must be started within 36 hours after termination of 24 hour composite sample collection. Bioassay of effluent sampling may be coordinated with other permit sampling requirements as appropriate to avoid duplication.

(2) Chemical analysis must accompany each effluent sample taken for bioassay test. The analysis detailed under Part I.A. should be conducted for the effluent sample. Chemical analysis must comply with approved EPA test methods.

d. Testing Frequency and Duration

The chronic toxicity tests specified in paragraph b above shall be conducted monthly for a period of three months and, if no toxicity is demonstrated as defined in paragraph f, the permittee(s) may reduce the number of species tested to only include the species demonstrated to be most sensitive to the toxicity in the effluent and shall conduct chronic toxicity testing once every six months thereafter for the duration of this permit. If toxicity is demonstrated as defined under paragraph f, the permittee(s) is required to conduct a toxicity reduction evaluation (TRE) as specified in Section 2 below.

e. Reporting

- (1) Results shall be reported according to EPA 600/4-91-002, Section 10 (Report Preparation). Two copies of the completed report for each test shall be submitted to the Data Management Section of the IDEM no later than sixty days after completion of the test.
- (2) For quality control the report shall include the results of appropriate standard reference toxicant tests for acute and chronic endpoints and historical reference toxicant data with mean values and appropriate ranges for the respective test species Ceriodaphnia dubia and Pimephales promelas. Biomonitoring reports must also include copies of Chain-of-Custody Records and Laboratory raw data sheets.
- (3) Statistical procedures used to analyze and interpret toxicity data including critical values of significance used to evaluate each point of toxicity should be described and included as part of the biomonitoring report.

f. Demonstration of Toxicity

- (1) Acute toxicity will be demonstrated if the effluent is observed to have LC₅₀ of less than 100% effluent for the test organism in 48 and 96 hours for Ceriodaphnia dubia or Pimephales promelas, respectively.
- (2) Chronic toxicity will be demonstrated if the No Observed Effect Level (NOEL) is less than **92%** for Ceriodaphnia dubia or Pimephales promelas.
- (3) If acute or chronic toxicity is found in any of the tests specified above, a confirmation toxicity test using the specified methodology and same test species shall be conducted within two weeks of the completion of the failed test to confirm results. If any two tests, including any and all confirmation tests, indicate the presence of toxicity, the permittee(s) must begin the implementation of a Toxicity Reduction Evaluation (TRE) as described below. The whole effluent toxicity tests required above may be suspended while the TRE is being conducted.

2. Toxicity Reduction Evaluation (TRE) Schedule of Compliance

The development and implementation of a TRE (including any post-TRE biomonitoring requirements) is only required if toxicity is demonstrated as defined by Paragraph 1.f.

a. Development of TRE Plan

Within 90 days of determination of toxicity, the permittee(s) shall submit plans for an effluent toxicity reduction evaluation (TRE) to the Data Management Section of the IDEM. The TRE plan shall include appropriate measures to characterize the causative toxicants and the variability associated with these compounds. Guidance on conducting effluent toxicity reduction evaluations is available from EPA and from the EPA publications listed below:

(1) Methods for Aquatic Toxicity Identification Evaluations:

Phase I Toxicity Characterization Procedures, Second Edition
(EPA/600/6-91/003), February 1991.

Phase II Toxicity Identification Procedures (EPA 600/3-88/035), February 1989.

Phase III Toxicity Confirmation Procedures (EPA/600/3-88/036), February 1989.

(2) Methods for Chronic Toxicity Identification

Phase I Characterization of Chronically Toxic Effluents EPA/600/6-91/005, June 1991.

(3) Generalized Methodology for Conducting Industrial Toxicity Reduction Evaluations (EPA/600/2-88/070), March 1989.

(4) Toxicity Reduction Evaluation Protocol for Municipal Wastewater Treatment Plants (EPA/600/2-88/062), April 1989.

b. Conduct the Plan

Within 30 days after submission of the TRE plan to the IDEM, the permittee(s) must initiate an effluent TRE consistent with the TRE plan. Progress reports shall be submitted every 90 days to the Data Management and Compliance Evaluation Sections of the Office of Water Management (OWM) beginning 90 days after initiation of the TRE study.

c. Reporting

Within 90 days of the TRE study completion, the permittee(s) shall submit to the Data Management and Compliance Evaluation Sections of the Office of Water Management (OWM) the final study results and a schedule for reducing the toxicity to acceptable levels through control of the toxicant source or treatment of whole effluent.

d. Compliance Date

The permittee(s) shall complete items a, b, and c from Section 2 above and reduce the toxicity to acceptable levels as soon as possible but no later than three years after the date of determination of toxicity.

e. Post-TRE Biomonitoring Requirements (Only Required After Completion of a TRE)

After the TRE, the permittee(s) shall conduct monthly toxicity tests with 2 or more species for a period of three months. Should three consecutive monthly tests demonstrate no toxicity, the permittee(s) may reduce the number of species tested to only include the species demonstrated to be most sensitive to the toxicity in the effluent, and conduct chronic tests every six months for the duration of the permit. If toxicity is demonstrated as defined in paragraph 1.f after the initial three month period, testing must revert to a TRE as in Part 2 (TRE). These tests shall be conducted in accordance with the procedures under the Whole Effluent Toxicity Testing Section above.

PART II

A. GENERAL CONDITIONS

1. Duty to Comply

The permittee(s) shall comply with all conditions of this permit in accordance with 327 IAC 5-2-8(1). Any permit noncompliance constitutes a violation of the Clean Water Act and IC 13 and is grounds for enforcement action or permit termination, revocation and reissuance, modification, or denial of a permit renewal application. In the event of a permit violation and/or applicable regulation, the City of Indianapolis and/or WREP may be held liable

2. Duty to Mitigate

In accordance with 327 IAC 5-2-8(3), the permittee(s) shall take all reasonable steps to minimize any adverse impact to waters of the State resulting from noncompliance with any effluent limitations specified in this permit, including such accelerated or additional monitoring as necessary to determine the nature and impact of the noncomplying discharge.

3. Duty to Provide Information

In accordance with 327 IAC 5-2-8(4)(B) and 40 CFR 122.41(h), the permittee(s) shall furnish to the Commissioner, within a reasonable time, any information which the Commissioner may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit or to determine compliance with this permit. In accordance with 327 IAC 5-2-8(7)(B), the permittee(s) shall also furnish to the Commissioner, upon request, copies of records required to be kept by this permit.

4. Duty to Reapply

If the permittee(s) wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee(s) must apply for and obtain a renewal of this permit in accordance with 327 IAC 5-2-8(2). It is the permittees' responsibility to request the application. The application must be submitted at least 180 days before the expiration date of this permit. The Commissioner may grant permission to submit an application less than 180 days in advance of the expiration date of this permit but no later than the permit expiration date. As required under 327 IAC 5-2-3(g)(1) and (2), POTWs with design influent flows equal to or greater than one million (1,000,000) gallons per day and POTWs with approved or that are to required to develop a pretreatment program, will be required to provide the results of whole effluent toxicity testing as part of their NPDES renewal application.

5. Transfers

The City of Indianapolis and its contract operator, White River Environmental Partnership, are both listed as permittees on this permit. If this contractual relationship is terminated, the City of Indianapolis becomes the sole permittee. The City of Indianapolis must notify IDEM if it contracts with another person other than an employee of the City to operate the facility. In accordance with 327 IAC 5-2-8(4)(D), this permit is nontransferable to any person except after notice to the Commissioner pursuant to 327 IAC 5-2-6(c). The Commissioner may require modification or revocation and reissuance of the permit to change the name of the permittee(s) and incorporate such other requirements as may be necessary under the Clean Water Act.

6. Permit Actions

In accordance with 327 IAC 5-2-8(4)(A), this permit may be modified, revoked and reissued, or terminated for cause, including, but not limited to, the following:

- a. Violation of any terms or conditions of this permit;
- b. Obtaining this permit by misrepresentation or failure to disclose fully all relevant facts; or
- c. A change in any condition that requires either a temporary or permanent reduction or elimination of the authorized discharge.

The filing of (1) a request by the permittee(s) for a permit modification, revocation and reissuance, or termination, or (2) a notification of planned changes or anticipated noncompliance, does not stay any permit condition.

7. Property Rights

The issuance of this permit does not convey any property rights of any sort or any exclusive privileges, nor does it authorize any injury to private property or an invasion of personal rights, nor any infringement of federal, state, or local laws or regulations as stated in 327 IAC 5-2-8(6).

8. Severability

In accordance with 327 IAC 1-1-3, the provisions of this permit are severable and, if any provision of this permit or the application of any provision of this permit to any circumstance is held invalid, the application or such provision to other circumstances and the remainder of this permit shall not be affected thereby.

9. Oil and Hazardous Substance Liability

Nothing in this permit shall be construed to relieve the permittee(s) from any responsibilities, liabilities, or penalties to which the permittee(s) is or may be subject to under Section 311 of the Clean Water Act.

10. State Laws

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee(s) from any responsibilities, liabilities, or penalties established pursuant to any applicable state law or regulation under authority preserved by Section 510 of the Clean Water Act.

11. Penalties for Violation of Permit Conditions

Pursuant to IC 13-30 and 327 IAC 5-2-20, any person who violates a permit condition implementing Sections 301, 302, 306, 307, 318, or 405 of the Clean Water Act is subject to a civil penalty not to exceed \$25,000 per day of such violation. Any person who willfully or negligently violates permit conditions implementing Sections 301, 302, 306, 307, or 308 of the Clean Water Act is subject to a fine of not less than \$2,500 nor more than \$25,000 per day of violation, or by imprisonment for not more than 1 year, or both. If the conviction is for a violation committed after a first conviction of such person under this provision, punishment shall be a fine of not more than fifty thousand dollars (\$50,000) per day of violation, or by imprisonment for not more than two (2) years, or both.

Except as provided in permit conditions on "Bypass of Treatment Facilities," Part II.B.2, and "Upset Conditions," Part II.B.3, nothing in this permit shall be construed to relieve the permittee(s) from civil or criminal penalties for noncompliance.

12. Toxic Pollutants

Notwithstanding Part II.C.3, if a toxic effluent standard or prohibition (including any schedule of compliance specified in such effluent standard or prohibition) is established under Section 307(a) of the Clean Water Act for a toxic pollutant which is present in the discharge and such standard or prohibition is more stringent than any limitation for such pollutant in this permit, this permit shall be modified or revoked and reissued to conform to the toxic effluent standard or prohibition in accordance with 327 IAC 5-2-8(5).

13. Containment Facilities

When cyanide or cyanogen compounds are used in any of the processes at this facility, the permittee(s) shall provide approved facilities for the containment of any losses of these compounds in accordance with the requirements of 327 IAC 2-2-1.

14. Operator Certification

The permittee(s) shall have the wastewater treatment facilities under the direct supervision of an operator certified by the Commissioner as required by IC 13-18-11 and 327 IAC 8-12-3.

15. Construction Permit

The permittee(s) shall not construct, install, or modify any water pollution control facility without a valid construction permit issued by the Commissioner pursuant to 327 IAC 3-2. Upon completion of any construction, the permittee(s) must notify the Compliance Evaluation Section of the Office of Water Management in writing.

16. Inspection and Entry

In accordance with 327 IAC 5-2-8(7), the permittee(s) shall allow the Commissioner, or an authorized representative, upon the presentation of credentials and other documents as may be required by law, to:

- a. Enter upon the permittee(s)'s premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;
- b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- c. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and
- d. Sample or monitor at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the Clean Water Act, any substances or parameters at any location.

B. MANAGEMENT REQUIREMENTS

1. Facility Operation, Maintenance and Quality Control

Pursuant to 327 IAC 5-2-8, all waste collection, control, treatment, and disposal facilities shall be operated in a manner consistent with the following:

- a. at all times, all facilities shall be operated as efficiently as possible and in a manner which will minimize upsets and discharges of excessive pollutants.
- b. the permittee(s) shall provide an adequate operating staff which is duly qualified to carry out the operation, maintenance, and testing functions required to ensure compliance with the conditions of this permit.
- c. maintenance of all waste collection, control, treatment, and disposal facilities that results in degradation of effluent quality shall be scheduled during noncritical water quality periods and shall be carried out in a manner approved by the Commissioner.
- d. Any extensions to the sewer system must continue to be constructed on a separated basis. Plans and specifications for extension of the sanitary system must be submitted to the Facility Construction Section, Office of Water Management in accordance with 327 IAC 3-2-1. There shall also be an ongoing program to prevent deterioration of the sanitary sewer system.

2. Bypass of Treatment Facilities

Pursuant to 327 IAC 5-2-8(11):

- a. Terms as defined in 327 IAC 5-2-8(11)(A):
 - (1) "Bypass" means the intentional diversion of a waste stream from any portion of a treatment facility.
 - (2) "Severe property damage" means substantial physical damage to property, damage to the treatment facilities which would cause them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.
- b. Bypasses, as defined herein, are prohibited, and the Commissioner may take

- enforcement action against a permittee(s) for bypass, unless:
- (1) Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage, as defined herein;
 - (2) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass that occurred during normal periods of equipment downtime or preventive maintenance; and
 - (3) The permittee(s) submitted notices as required under Part II.B.2.d; or
 - (4) The condition under Part II.B.2.f below is met.
- c. In accordance with 327 IAC 2-6.1, bypasses which result in damage or death are subject to the "Two-Hour Reporting Requirements" in Part II.C.9 of this permit.
- d. The permittee(s) must provide the Commissioner with the following notice:
- (1) If the permittee(s) knows or should have known in advance of the need for a bypass (anticipated bypass), it shall submit prior written notice. If possible, such notice shall be provided at least ten (10) days before the date of the bypass for approval by the Commissioner.
 - (2) The permittee(s) shall orally report an unanticipated bypass within 24 hours of becoming aware of the bypass event. The permittee(s) must also provide a written report within five (5) days of the time the permittee(s) becomes aware of the bypass event. The written report must contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times; if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate and prevent recurrence of the event. Alternatively, in accordance with 327 IAC 2-6.1, the permittee(s) may be subject to the "Two-Hour Reporting Requirements" in Part II.C.9 of this permit if the unanticipated bypass causes damage to waters of the State.
- e. The Commissioner may approve an anticipated bypass, after considering its adverse

- effects, if the Commissioner determines that it will meet the conditions listed above in Part II.B.2.b. The Commissioner may impose any conditions determined to be necessary to minimize any adverse effects.
- f. The permittee(s) may allow any bypass to occur that does not cause a violation of the effluent limitations in the permit, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of Part II.B.2.d and e of this permit.
- g. The wastewater treatment plant and/or system has the following bypass points:
- | <u>Outfall No.</u> | <u>Location</u> | <u>Receiving Stream</u> |
|--------------------|--------------------------------------|-------------------------|
| 002 A & B | Southport Primary Effluent Diversion | Little Buck Creek |
| 003 A & B | Southport Raw Wastewater Bypass | Little Buck Creek |
- h. Discharge from combined sewers, referenced in Attachment A, solely caused by rainfall shall be reported as specified in Part II of Attachment A. Additional requirements regarding CSO discharges are found in Attachment A of this permit. In accordance with 327 IAC 2-6.1, discharges from CSOs which result in damage or death are subject to the "Two-Hour Reporting Requirements" in Part II.C.9 of this permit. Additional requirements regarding CSO discharges and the listing of all CSO discharge points are found in Attachment A of the Belmont AWT NPDES Permit.

3. Upset Conditions

Pursuant to 327 IAC 5-2-8(12):

- a. "Upset" means an exceptional incident in which there is unintentional and temporary noncompliance with technology-based permit effluent limitations because of factors beyond the reasonable control of the permittee(s). An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.
- b. An upset shall constitute an affirmative defense to an action brought for noncompliance with such technology-based permit effluent limitations if the requirements of Paragraph c of this subsection, are met.
- c. A permittee(s) who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs or other relevant evidence, that:

(1) An upset occurred and the permittee(s) has identified the specific cause(s) of the

upset, if possible;

- (2) The permitted facility was at the time being operated in compliance with proper operation and maintenance procedures;
- (3) The permittee(s) complied with any remedial measures required under "Duty to Mitigate", Part II.A.2; and
- (4) The permittee(s) submitted notice of the upset as required in the "Twenty-Four Hour Reporting Requirements," Part II.C.3, or the "Two Hour Reporting Requirements," Part II.C.9, whichever is applicable.

4. Removed Substances

Solids, sludges, filter backwash, or other pollutants removed from or resulting from treatment or control of wastewaters shall be disposed of in a manner such as to prevent any pollutant from such materials from entering waters of the State and to be in compliance with all Indiana statutes and regulations relative to liquid and/or solid waste disposal.

- a. Collected screenings, slurries, sludges, and other such pollutants shall be disposed of in accordance with methods established in 329 IAC 10 and 327 IAC 6.1, or another method approved by the Commissioner.
- b. The permittee(s) shall comply with existing federal regulations governing solids disposal, and with applicable 40 CFR Part 503, the federal sludge disposal regulation standards.
- c. The permittee(s) shall notify the Commissioner prior to any changes in sludge use or disposal practices.

5. Power Failures

In accordance with 327 IAC 5-2-8(13), in order to maintain compliance with the effluent limitations and prohibitions of this permit, the permittee(s) shall either:

- a. provide an alternative power source sufficient to operate facilities utilized by the permittee(s) to maintain compliance with the effluent limitations and conditions of this permit, or

- b. shall halt, reduce or otherwise control all discharge in order to maintain compliance with the effluent limitations and conditions of this permit upon the reduction, loss, or failure of one or more of the primary sources of power to facilities utilized by the permittee(s) to maintain compliance with the effluent limitations and conditions of this permit.

C. REPORTING REQUIREMENTS

1. Planned Changes in Facility or Discharge

Pursuant to 327 IAC 5-2-8(10)(F) any anticipated facility expansions, production increases, or process modifications which will result in new, different, or increased discharges of pollutants must be reported by submission of a new NPDES application or, if such changes will not violate the effluent limitations specified in this permit, by advance notice to the Commissioner of such changes. Following such notice, the permit may be modified to revise existing pollutant limitations and/or to specify and limit any pollutants not previously limited.

2. Monitoring Reports

Pursuant to 327 IAC 5-2-8(9) and 327 IAC 5-2-13, monitoring results shall be reported at the intervals and in the form specified in "Data On Plant Operation", Part I.B.2.

3. Twenty-Four Hour Reporting Requirements

Pursuant to 327 IAC 5-2-8(10), the permittee(s) shall orally report to the Commissioner information on the following types of noncompliance within 24 hours from the time permittee(s) becomes aware of such noncompliance:

- a. Any unanticipated bypass which exceeds any effluent limitation in the permit;
- b. Any noncompliance which may pose a significant danger to human health or the environment;
- c. Any upset (as defined in Part II.B.3 above) that exceeds any effluent limitations in the permit;
- d. Any discharge from a sanitary sewer overflow which is identified in this permit;
- e. Any dry weather discharge from a combined sewer overflow which is identified in this permit; and,

- f. Violation of a maximum daily discharge limitation for any of the following toxic pollutants:

Cadmium
Cyanide
Mercury

The permittee(s) can make the oral reports by calling 317/232-8795 during regular business hours or by calling 317/233-7745 (888/233-7745 toll free in Indiana) during non-business hours. A written submission shall also be provided within five (5) days of the time the permittee(s) becomes aware of the circumstances. The written submission shall contain: a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and, if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce and eliminate the noncompliance and prevent its recurrence. The Commissioner may waive the written report on a case-by-case basis if the oral report has been received within 24 hours. Alternatively the permittee(s) may submit a "Bypass Fax Report" to IDEM at 317/232-8637. If a complete fax submittal is sent within 24 hours of the time that the permittee(s) became aware of the occurrence, then the fax report will satisfy both the oral and written reporting requirements.

4. Other Noncompliance

Pursuant to 327 IAC 5-2-8(10)(D), the permittee(s) shall report any instance of noncompliance not reported under the "Twenty-Four Hour Reporting Requirements" in Part II.C.3 or any compliance schedules at the time the pertinent Discharge Monitoring Report is submitted. The report shall contain the information specified in Part II.C.3 of this permit.

5. Other Information

Pursuant to 327 IAC 5-2-8(10)(E), where the permittee(s) becomes aware of a failure to submit any relevant facts or submitted incorrect information in a permit application or in any report, the permittee(s) shall promptly submit such facts or corrected information to the Commissioner.

6. Signatory Requirements

Pursuant to 327 IAC 5-2-22 and 327 IAC 5-2-8(14):

- a. All reports required by the permit and other information requested by the Commissioner shall be signed and certified by a person described below or by a duly authorized representative of that person:

- (1) For a corporation: by a principal executive defined as a president, secretary, treasurer, any vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy-making functions for the corporation or the manager of one or more manufacturing, production, or operating facilities employing more than two hundred fifty (250) persons or having gross annual sales or expenditures exceeding twenty-five million dollars (25,000,000) (in second quarter 1980 dollars), if authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.
 - (2) For a partnership or sole proprietorship: by a general partner or the proprietor, respectively; or
 - (3) For a federal, state, or local governmental body or any agency or political subdivision thereof: by either a principal executive officer or ranking elected official.
- b. A person is a duly authorized representative only if:
- (1) The authorization is made in writing by a person described above.
 - (2) The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity, such as the position of plant manager, operator of a well or a well field, superintendent, or position of equivalent responsibility. (A duly authorized representative may thus be either a named individual or any individual occupying a named position); and
 - (3) The authorization is submitted to the Commissioner.
- c. Certification. Any person signing a document identified under paragraphs a and b of this section, shall make the following certification:
- "I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

7. Availability of Reports

Except for data determined to be confidential under 327 IAC 12, all reports prepared in accordance with the terms of this permit shall be available for public inspection at the offices of the Indiana Department of Environmental Management and the Regional Administrator. As required by the Clean Water Act, permit applications, permits, and effluent data shall not be considered confidential.

8. Penalties for Falsification of Reports

IC 13-30 and 327 IAC 5-2-10(14) provides that any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or noncompliance, shall, upon conviction, be punished by a fine or not more than \$10,000 per violation, or by imprisonment for not more than 6 months per violation, or by both.

9. Two-Hour Reporting Requirement

Pursuant to 327 IAC 2-6.1, any discharge of pollutants to waters of the State from the permittee(s)'s collection system or wastewater treatment plant which results in damage, acute injury, or death to any humans, animals, or aquatic life must be reported as soon as possible, but within two (2) hours after the permittee(s) becomes aware of the occurrence. (This includes any discharge regardless of whether or not it is authorized by the NPDES permit).

Any discharge of pollutants which enters waters of the State from the permittee(s)'s collection system or wastewater treatment plant and which is not authorized by the NPDES permit must also be reported within two (2) hours after the permittee(s) becomes aware of the occurrence. [Note: Only those outfalls which are specifically identified in Part I.A, Part II.B.2.g, and/or Attachment A of this permit are considered to be authorized discharges under this NPDES permit]. Any unauthorized discharge of pollutants from the collection system which does not reach waters of the State must be reported to the IDEM in accordance with the "Twenty-Four Hour Reporting Requirements" in Part II.C.3.

The permittee(s) is required to notify IDEM's Office of Emergency Response at 317/233-7745 or 888/233-7745 (toll-free within Indiana) of any discharges which meet the criteria of 327 IAC 2-6.1.

PART III

**REQUIREMENT TO OPERATE
A PRETREATMENT PROGRAM**

A. CONDITIONS

The permittee(s), hereinafter referred to as the "Control Authority," are required to operate its approved industrial pretreatment program approved on January 11, 1985 and modified as approved on March 3, 1994. To ensure the program is operated as approved and consistent with 327 IAC 5-11 through 5-15, the following conditions and reporting requirements are hereby established. The Control Authority (CA) shall:

1. **LEGAL AUTHORITY** - The CA shall develop, enforce and maintain adequate legal authority in its Sewer Use Ordinance (SUO) to fully implement the pretreatment program in compliance with State and local law. As part of this requirement, the CA shall develop and maintain local limits as necessary to implement the prohibitions and standards in 327 IAC 5-12. The Control Authority shall perform a technical reevaluation of local limits within nine (9) months of the effective date of this permit.
2. **PERMIT ISSUANCE** - The CA is required to issue/reissue permits to Significant Industrial User(s) (SIU) as stated in the SUO. The permittee(s) must issue permits to new SIUs prior to the commencement of discharge. A SIU is defined in the SUO.
3. **INDUSTRIAL COMPLIANCE MONITORING** - The CA is required to conduct inspection, surveillance, and monitoring activities to determine SIU compliance status with the approved program and the SUO independent of data supplied by the SIU. SIU compliance monitoring performed by the CA will be conducted in accordance with the program plan or yearly program plan. SIUs will be inspected once per year, at minimum.
4. **ENFORCEMENT** - The CA is required to initiate the appropriate enforcement action against a SIU violating any provision of the SUO and/or discharge permit in accordance with the Enforcement Response Procedures (ERP) adopted by the CA. The CA must investigate violations by collecting and analyzing samples and collecting other information with sufficient care to produce evidence admissible in enforcement proceedings or in judicial actions.
5. **ANNUAL REPORT** - The CA is required to submit an annual report to the Pretreatment Group by April 1 of each year. The annual report will be submitted in accordance with the State supplied "POTW PRETREATMENT PROGRAM ANNUAL REPORT GUIDANCE".

6. **SIU QUARTERLY NONCOMPLIANCE REPORT** - The CA is required to report the compliance status of each SIU quarterly. The report is due by the 28th of the following months: May, August, November, and February of each year. The report shall include a description of corrective actions that have or will be taken by the CA and SIU to resolve the noncompliance situations. This report is to be sent to the Pretreatment Group.
7. **PUBLIC PARTICIPATION AND ANNUAL PUBLISHING OF SIUs IN SIGNIFICANT NONCOMPLIANCE** - The CA is required to comply with the public participation requirements under 40 CFR 25. The CA must publish annually, by January 28, in the largest daily newspaper in the area, a list of SIUs that have been in significant noncompliance (SNC) with the SUO during the calendar year. The CA shall include in the ANNUAL REPORT a list of the SIUs published along with the newspaper clipping.
8. **CONFIDENTIALITY** - The CA is required to comply with all confidentiality requirements set forth in 40 CFR 403.14, as well as the procedures established in the SUO.
9. **RECORDS RETENTION** - The CA shall retain any pretreatment reports from an industrial user a minimum of three (3) years and shall make such reports available for inspection and copying by IDEM or the U.S. EPA. This period of retention shall be extended during the course of any unresolved litigation regarding the discharge of pollutants by the industrial user or the operation of the POTW pretreatment program or when requested by IDEM or the U.S. EPA.
10. **PROGRAM RESOURCES** - The CA shall maintain sufficient resources and qualified personnel to carry out the pretreatment program requirements.
11. **INTERJURISDICTIONAL AGREEMENTS** - The CA must maintain sufficient legal authority to ensure compliance with all applicable pretreatment limits and requirements by all SIUs discharging to the POTW, including SIUs within governmental jurisdictions outside the immediate jurisdiction of the POTW. The CA must maintain the interjurisdictional agreements necessary to ensure full compliance by SIUs located within other jurisdictions.

B. POLLUTANT LOADING STUDY

This study is required to identify sources of cadmium, cyanide, mercury, chloride, fluoride, sulfate, and total dissolved solids within the entire sewage collection and treatment system. The study in identifying sources of mercury shall include sampling locations of any known or potential sources of mercury such as: hospitals; universities; industrial research facilities both past and present; and, other potential sources of mercury. Mercury sampling and analysis conducted shall be consistent with EPA Method 1631.

1. DETERMINING THE LOADINGS

There are at least four potential sources the POTW should evaluate to determine the total pollutant loading entering the sewage treatment plant: domestic, nonpoint, recycle streams (supernatant return) and industrial.

a. General Conditions

- (1) All sampling required below will be by 24-Hr. Composite except for drinking water, nonpoint sources which shall be by grab sample.
- (2) Analysis will be performed for all of the pollutants listed in Part I.A.3 of this permit.
- (3) Flow measurement shall be taken at each sample site.

b. Domestic Sources: Conduct a study of the POTW sewer system to determine the pollutant loading to the sewage plant from nonindustrial sources.

- (1) Sample and analyze sewers containing domestic waste only. The POTW shall provide a schematic of the sewage system that identifies the location of the industrial users and where the sewer samples were taken. Sampling shall be performed two times a month at two different sites for a period of six months.
- (2) Sample and analyze the permittee(s) supplied drinking water once per month for a period of six months.

c. Nonpoint Source Study: This part is to be performed only when part or all of the sewer system is combined.

Sample and analyze storm water runoff from selected areas, generally parking lots, streets, etc. These areas shall also be identified on the map. Sampling shall be performed during periods of rainfall.

Sampling shall be performed for a period of six months with a minimum of one sample per month from each site chosen. There shall be no less than three sites sampled.

d. Industrial Source Study:

Calculate the industrial loading from data generated in the compliance sampling program and IU self monitoring reports.

e. Recycle Streams: This includes all wastewater returned to the head of the plant.

Sample and analyze each recycle stream or a combined stream two times a month for a period of six months.

2. REPORT ON THE STUDY

A report shall be prepared containing all of the sampling and analytical data collected. The report shall be submitted in the format contained in the State guidance "POLLUTANT LOADING STUDY REPORT GUIDANCE." The report shall summarize the information and describe the Permittee(s) evaluation of the results. The report shall include a projected schedule for actions needed to attain compliance with the final effluent limitations. The report shall also determine the level of reduction of pollutant loading from industrial sources necessary to bring the POTW into compliance, taking into account the amount of pollutant loading reductions that can be achieved from domestic and nonpoint sources. Evaluate the impact this will have on industry. This office will provide the permittee(s) with the necessary assistance to complete this evaluation.

The report shall consist of a cover letter, cover page, table of contents, summary of the results, the evaluation, maps identifying sampling sites, tables listing the analytical results and tables listing the pounds of pollutants from the percentage attributable to each source. The results of this study shall be due within one year of the issuance of this permit and shall be submitted to the attention of the Permits Section, Office of Water Management.

3. STATE ACTION AND REOPENING CLAUSE

This pollutant loading study may determine that some or all of the limitations in Part I.A.4 and 5, of this permit are unattainable due to background pollutant concentrations, technological feasibility constraints, or other valid factors. The IDEM reserves the right to reopen this permit to modify any limitations in Part I.A.4 and 5, of this permit that are so deemed to be unattainable by the POTW.